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| 10/689,444 | 10/20/2003 | Kai-Chieh Liang | SLA1369 | 3379 |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/689,444 | LIANG, KAI-CHIEH | |
| | Examiner | Art Unit | |
| | Jason Thomas | 2423 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *25 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,6-14,19-25,30-38 and 43-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,6-14,19-25,30-38 and 43-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed February 25, 2009 have been fully considered but they are not persuasive.

Applicant suggest that using a lid in a UHTTP header is a far reach from embedding a lid in an IOD for the purposes of providing a name/access scheme to objects in a DSM-CC U-U OC. While the each reference when viewed independently of one another may not, on its face, appear to teach methods claimed by applicant, each reference shows a level of technological standards well known in the art.

Applicant argues that "none of the references disclose the use of MPEG-2 DSM-CC OC transmissions to carry MPEG-4 resources" (see [p.18]) and also that "Peng does not explicitly describe or suggest how MPEG-4 resources can be provided via object and data carousels" (see [p.19]). Pereira teaches transporting MPEG-4 content over MPEG-2 transport and program streams (see [7.4/p.268]) as well as the ability to offer scene and object descriptors, carried over the MPEG-2 stream, to offer rich extensions to the underlying basic MPEG-2 service (Ibid.). Pereira goes further to describe a program with MPEG-4 components enabling content within the MPEG-4 coding to be accessed by a receiving device such that multiple MPEG-4 presentations can then be associated with an MPEG-2 program using a form of mapping between an ES_ID and the MPEG-4 IOD

standard. This, the means to convey the IOD and its semantics in the context of the MPEG-2 system are possible (Ibid.). While Peng does not teach explicitly teach how MPEG-4 resources can be provided via object and data carousels, Peng teaches the method of using MPEG-2 DSM-CC U-U OC to cyclically transmit data modules, such as Xlets, embedded in an MPEG-2 stream over a broadcasting network (see [p1]). Thus in combination it would be obvious to one of ordinary skill in the art that MPEG-4 content which is made accessible in an MPEG-2 data stream could also be used in a similar manner as the MPEG-2 which uses a system such as DSM-CC U-U OC to cyclically distribute data modules over a broadcasting network once accessed within the media stream.

Applicant also suggest that "the mere mention of a lid URI (in an ATVEF context) does not suggest its use for a different purpose in a different protocol" (see [p.20]) and as a result, "none of the reference disclose a lid embedded in an IOD" (see [p. 18]). Stone teaches the use of LIDs in an ATVEF broadcasting system for the purpose of conveying information, once specific to a local terminal device, to some other remote terminal device in the form of local identifiers. The LIDs having been once used to locate resources within the local terminal from which it derived, per Stone's specification, are capable of retaining their usefulness but only after undergoing a process which reformats the LIDs to represent an address linkable to the terminal from which they derived. These LIDs are stored within the received signal which is parsed to find any URLs to data resources. Thus the spirit and scope of the invention is a means to convey

location information over a broadcast system which identifies a particular resource previously identified using local address protocol which once transferred to a remote device can maintain it's usefulness through simple reformatting process. Stone demonstrates where a LID is simply an alternate protocol used to indicate the location of a particular resource local to a particular terminal device (see [abstract]). Stone further teaches that the information contained in a LID can be used once reformatted to provide useful information by still functioning as a resource locator to provide information indicating the location of said resource. In this context the method of using a LID in an IOD to reference a particular resource is analogous to Stone's use of a LID while used under the protocol of a local terminal device. Thus it would be obvious for one of ordinary skill in the art to use a local protocol, such as a LID, when using a terminal device, able to store and executed content locally, as taught in Stone, in addition to reformatting the LIDs to provide more meaningful and useful addresses for remote devices.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 6-11, 13, 14, 19-25, 30-35, 37, 38 and 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pereira et al., "The MPEG-4 Book" (hereinafter Pereira), in view of Djupsjobacka et al., European Pat. No. 0854650 A2, (hereinafter Djupsjobacka), Christopher Stone, U.S. Pre- Grant Pub. No. 2003/0056224 A1 (hereinafter Stone) and Peng et al., "Digital Television Application Manager", IEEE. (hereinafter Peng).

**Regarding claim 1:** Pereira discloses a method for receiving of MPEG-4 data resources broadcast in a European Digital Video Broadcasting (DVB) network (see [section 3], [section 3.1.3], [section 7.4] for broadcasting and receiving MPEG-4 over DVB), the method comprising: receiving an MPEG-2 Transport Stream with hierarchical structure MPEG-4 resources (see [fig. 3.1], [section 3.1], [section 7.4.1.3] for receiving an MPEG-TS which includes forming MPEG-4 resources in a hierarchical directory structure) packetized object (see [fig. 7.13], [section 7.4.1.3] for packetized objects); locating a uniform resource locator (URL) which reads on a universal resource identifier (URI) in the TS; in response to the URL, accessing an address in the object; in response to accessing the address, retrieving MPEG-4 resources; and, decoding the MPEG-4 resources (see [section 3.1.2] for locating a URL; finding the resource pointed to by the URL, and [section 3.1.3] for retrieving and decoding the resource by assembling a presentation from such MPEG-4 content).

Pereira does not teach using a terminal specifically designed for DVB multimedia with a packetized DSM-CC User-to-User Object Carousel where the

address accessed points to the DSM-CC U-U OC and where the resources are retrieved from the DSM-CC U-U OC.

Djupsjobacka however teaches a terminal capable of complying with the DVB definitions and where DSM-CC protocols are used to support interactive digital video broadcasting applications. Djupsjobacka further teaches the application of User-to-User and DSM-CC OC address modifications for additional benefits received from the located URL (see [fig. 2a item 7], [fig. 6, item 28], [pg. 2, ll. 41-44], [pgs. 3-4, ll. 41-2], [pg. 5, ll. 20-32], [pg. 7, ll. 2-29], [pg. 7, ll. 52-55]).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to use DSM-CC U-U OC protocols, as taught in Djupsjobacka, when transmitting MPEG-4 resources through a MPEG-2 transport stream, as taught in Pereira, because using the DSM-CC U-U OC protocols enables additional resource management benefits such as hierarchic naming, and program server assignment to individual names (see [pg. 3, ll. 50-54]).

Pereria does not teach wherein a local identifier, "LID", address is embedded in an initial object descriptor providing a binding name and access scheme to the objects in the DSM-CC U-U OC selected from the group including a BIFS scene description stream and an object descriptor stream.

Stone teaches the use of a LID to assign unique identifiers to each resource relative to a given namespace to provide human-readable names for all

resources within that space so that they can be later accessed by a local receiver (see [18] where lid provides a binding name and access scheme).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use a LID which provides a means to bind a human-readable name to provide a way to access each unique and individual embedded resource, as taught in Stone, which is embedded in an IOD to bind and access resources selected from the group including scene description streams (BIFS) and object descriptors (ODs) , as taught in Pereira, because by using a LID one can provide a unique local identifier for each specific resources to be accessed by a receiver (see [18-19]).

Pereria does not teach where the LID is used to locate resources in a DVB-MHP standard.

Peng teaches using a common platform, the DVB-MHP standard, for accessing a range of services where the DVB-MHP Java category is capable of being used as an object or data carousel where resources can be located (see [pp. 104, Section 1]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use the Multimedia Home Platform standard, as taught in Peng, to provide a means of using the capabilities of MPEG 4 to provide multimedia services, as taught in Pereira, because DVB-MHP is a common platform for users to access a range of multimedia services which are commonly provided via object and data carousels (see [pg. 4, ll. 31-33]).

**Regarding claim 14:** Pereira discloses a method for broadcasting pointers to MPEG-4 data in a European Digital Video Broadcasting (DVB) network (see [section 3.1.2], [section 7.4] for broadcasting information that points to MPEG-4 data over DVB), the method comprising: embedding hierarchical structure MPEG-4 resources (see [fig. 3.1], [section 3.1], [section 7.4.1.3] for receiving an MPEG-TS which includes forming MPEG-4 resources in a hierarchical directory structure); packetizing the objects in an MPEG-2 transport stream (TS); using a uniform resource locator (URL) for accessing MPEG-4 resources located at an address; embedding the URL in an MPEG-2 TS; and, broadcasting the MPEG-2 TS (see [7.4.3.1] embedding and packetizing resources in MPEG-2 TS; see also [section 3.1.2], [section 3.1.8] for a URL used for accessing MPEG-4 resources; see also [section 7.4] for broadcasting MPEG-4 over a MPEG-2 TS).

Pereira does not teach the generation of the URL or the use of a DSM-CC U-U OC in the methods used to broadcast.

Djupsjobacka teaches the generation of the URL and using DSM-CC U-U OC methods for broadcasting digital packets (see [pgs. 3-4, ll. 41-2]).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to generate a URL and use DSM-CC U-U OC protocols, as taught in Djupsjobacka, when providing a means of access to MPEG-4 resources through a MPEG-2 transport stream, as taught in Pereira, because using the DSM-CC U-U OC protocols when generating a URL enables additional

resource management benefits such as hierarchic naming, and program server assignment to individual names (see [pg. 3, ll. 50-54]).

Pereria does not teach wherein a local identifier, "LID", address is embedded in an initial object descriptor providing a binding name and access scheme to the objects in the DSM-CC U-U OC selected from the group including a BIFS scene description stream and an object descriptor stream.

Stone teaches the use of a LID to assign unique identifiers to each resource relative to a given namespace to provide human-readable names for all resources within that space so that they can be later accessed by a local receiver (see [18] where lid provides a binding name and access scheme).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use a LID which provides a means to bind a human-readable name to provide a way to access each unique and individual embedded resource, as taught in Stone, which is embedded in an IOD to bind and access resources selected from the group including scene description streams (BIFS) and object descriptors (ODs) , as taught in Pereira, because by using a LID one can provide a unique local identifier for each specific resources to be accessed by a receiver (see [18-19]).

Pereria does not teach where the LID is used to locate resources in a DVB-MHP standard.

Peng teaches using a common platform, the DVB-MHP standard, for accessing a range of services where the DVB-MHP Java category is capable of

being used as an object or data carousel where resources can be located (see [pp. 104, Section 1]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use the Multimedia Home Platform standard, as taught in Peng, to provide a means of using the capabilities of MPEG 4 to provide multimedia services, as taught in Pereira, because DVB-MHP is a common platform for users to access a range of multimedia services which are commonly provided via object and data carousels (see [pg. 4, ll. 31-33]).

**Regarding claim 25:** Pereira teaches a method of broadcasting MPEG-4 over MPEG-2 transport stream but does not teach a system for broadcasting.

Djupsjobacka discloses a European Digital Video Broadcasting (DVB) Multimedia Home Platform (MHP) terminal for receiving broadcast MPEG-4 data resources, the system comprising: a receiver having an interface for accepting an MPEG-transport stream (TS) with an embedded uniform resource indicator (URI) and a hierarchical structure MPEG-4 resources (see [fig. 3.1], [section 3.1], [section 7.4.1.3] for receiving an MPEG-TS which includes forming MPEG-4 resources in a hierarchical directory structure) packetized DSM-CC User-to-User (U-U) Object Carousel (OC): an address access unit having an interface to accept the MPEG-2 TS from the receiver, the address access unit locating a URI in the TS, accessing an address, and retrieving MPEG-4 resources from the DSM-CC U-U OC; and, a decoder having an interface connected to the address access unit for receiving the MPEG-4 resources and an interface for supplying

decoded MPEG-4 information (see [fig. 2a], [fig. 7], [pg. 2, ll. 45-52], [pgs. 3-4, ll. 41-2], [pg. 7, ll. 1-25], [pgs. 7-8, ll. 52-3]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to design a receiver for receiving MPEG resources, as taught in Djupsjobacka, to implement the methods of transporting MPEG-4 over MPEG-2 transport stream, as taught in Pereira, because a physical device is necessary to realize the benefits of using MPEG-4 broadcasting.

Pereria does not teach wherein a local identifier, "LID", address is embedded in an initial object descriptor providing a binding name and access scheme to the objects in the DSM-CC U-U OC selected from the group including a BIFS scene description stream and an object descriptor stream.

Stone teaches the use of a LID to assign unique identifiers to each resource relative to a given namespace to provide human-readable names for all resources within that space so that they can be later accessed by a local receiver (see [18] where lid provides a binding name and access scheme).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use a LID which provides a means to bind a human-readable name to provide a way to access each unique and individual embedded resource, as taught in Stone, which is embedded in an IOD to bind and access resources selected from the group including scene description streams (BIFS) and object descriptors (ODs) , as taught in Pereira, because by using a LID one

can provide a unique local identifier for each specific resources to be accessed by a receiver (see [18-19]).

Pereria does not teach where the LID is used to locate resources in a DVB-MHP standard.

Peng teaches using a common platform, the DVB-MHP standard, for accessing a range of services where the DVB-MHP Java category is capable of being used as an object or data carousel where resources can be located (see [pp. 104, Section 1]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use the Multimedia Home Platform standard, as taught in Peng, to provide a means of using the capabilities of MPEG 4 to provide multimedia services, as taught in Pereira, because DVB-MHP is a common platform for users to access a range of multimedia services which are commonly provided via object and data carousels (see [pg. 4, ll. 31-33]).

**Regarding claim 38:** Pereira teaches a method of broadcasting MPEG-4 over MPEG-2 transport stream but does not teach a system for broadcasting.

Djupsjobacka teaches a European Digital Video Broadcasting (DVB) system for transmitting MPEG-4 resources, the system comprising: an address pointer unit (APU) having an interface to supply an MPEG-2 transport stream (TS) with uniform resource identifiers (URIs) for accessing hierarchical structure MPEG-4 resources (see [fig. 3.1], [section 3.1], [section 7.4.1.3] for receiving an MPEG-TS which includes forming MPEG-4 resources in a hierarchical directory

structure) embedded in an DSM-CC User-to- User (U-U) Object Carousel (OC), and to supply a MPEG-2 TS with the packetized DSM-CC U-U OC; and, a transmitter having an interface to accept the MPEG-2 TS, with the packetized DSM-CC U-U OC from the address pointer unit, and an interface to broadcast the MPEG-2 TS (see [fig. 2a], [fig. 7], [pgs. 3-4, ll. 41-2], [pgs. 4-5, ll. 57-19], [pg. 21]; [pg. 7-8, ll. 56-3] for a service name server (SNS) which reads on an address pointer unit; see also [claim 14], [claim 15]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to design a system for broadcasting MPEG resources, as taught in Djupsjobacka, to implement the methods of transporting MPEG-4 over MPEG-2 transport stream, as taught in Pereira, because a physical system is necessary to realize the benefits of using MPEG-4 broadcasting.

Pereria does not teach wherein a local identifier, "LID", address is embedded in an initial object descriptor providing a binding name and access scheme to the objects in the DSM-CC U-U OC selected from the group including a BIFS scene description stream and an object descriptor stream.

Stone teaches the use of a LID to assign unique identifiers to each resource relative to a given namespace to provide human-readable names for all resources within that space so that they can be later accessed by a local receiver (see [18] where lid provides a binding name and access scheme).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use a LID which provides a means to bind a human-

readable name to provide a way to access each unique and individual embedded resource, as taught in Stone, which is embedded in an IOD to bind and access resources selected from the group including scene description streams (BIFS) and object descriptors (ODs) , as taught in Pereira, because by using a LID one can provide a unique local identifier for each specific resources to be accessed by a receiver (see [18-19]).

Pereria does not teach where the LID is used to locate resources in a DVB-MHP standard.

Peng teaches using a common platform, the DVB-MHP standard, for accessing a range of services where the DVB-MHP Java category is capable of being used as an object or data carousel where resources can be located (see [pp. 104, Section 1]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use the Multimedia Home Platform standard, as taught in Peng, to provide a means of using the capabilities of MPEG 4 to provide multimedia services, as taught in Pereira, because DVB-MHP is a common platform for users to access a range of multimedia services which are commonly provided via object and data carousels (see [pg. 4, ll. 31-33]).

**Regarding claim 6, 19, 30 and 43:** The combined teachings of Pereira, in view of Djupsjobacka, Stone and Peng, teach the use of hierarchal structuring of information (see Pereira [section 3.1]).

Pereira does not teach wherein forming a hierarchical directory structure includes forming a hierarchical directory structure of BIOP objects including a DSM::ServiceGateway, a DSM::Directory, DSM::Stream, and a DSM::File or where this is formed by an APU.

Djupsjobacka teaches a hierarchical structure which includes a DSM::ServiceGateway, DSM::Directory, DSM::Stream, and DSM::File and where the structure is formed by a service name server (see [pg. 6, ll. 21-24], [pg. 7, ll. 2-15], [pgs. 7-8, ll. 56-3]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use directories which have a hierarchal structure to provide access to files, as taught in Pereira, when structuring information, as taught in Pereira, because structuring how information is stored provides more efficient access to data.

**Regarding claims 7, 20, 31 and 44:** The combined teachings of Pereira, in view of Djupsjobacka, Stone and Peng, teach a method of broadcasting MPEG-4 over MPEG-2 transport stream (see Pereira [section 7.4]).

Pereira does not teach wherein retrieving MPEG resources from the MHP OC, in response to accessing the address, includes: locating a DSI message; extracting the IOR for the Service Gateway; parsing the Service Gateway object; extracting IORs for Directory, Stream, and File objects from the Service Gateway binding structure; and, acquiring MPEG-4 resources from the Stream and File objects.

Djupsjobacka teaches locating an indication message which contains module identification information (which reads on service gateway) whereby the module_id information contained within the message is extracted from the packet and divided (parsed) so that resources can be retrieved on the basis of the service component name and the resources are received from the data transmission stream using the set top box (see [pg. 7, ll. 18-29]; see also [pg. 2, ll. 41-44] where the steps which proceed retrieving, the reverse operations used to embed the TS prior to receiving, are known to have been conducted in the processes described herein).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to one of ordinary skill in the art to retrieve MPEG-4 resources, as taught by Pereira, by accessing the resource address information, as taught in Djupsjobacka, because it is common for MPEG resource data, whether it be MPEG-2 or MPEG-4 data, to be referenced by some form of address information (see [pg. 4, ll. 11-13]).

**Regarding claim 8, 21, 32 and 45:** The combined teachings of Pereira, in view of Djupsjobacka, Stone and Peng, teach transporting MPEG-4 content over a MPEG-2 transport stream (see Pereira [section 7.4]) and ability to link media streams (see Pereira [3.1.4], [3.1.6], [3.1.7] for linking media streams).

Pereira does not teach receiving an MPEG-2 TS, with a packetized MHP OC, includes receiving a first MPEG-2 TS and a second MPEG-2 TS with a packetized MHP OC.

Djupsjobacka teaches wherein receiving an MPEG-TS, with a packetized multimedia home platform (terminal or computer) OC, includes receiving multiple transport streams (which would include a first and second) with a packetized MHP OC (see [pg. 2, ll. 16-19], [pg. 3-4, ll. 55-2] for multiple transmission streams); wherein locating a URI in the TS includes retrieving a lid URI in the first MPEG-2 TS ; and, wherein retrieving MPEG resources (which reads on objects that would be transmitted in an MPEG-4 TS) from the MHP OC, in response to accessing the lid URI, includes retrieving said MPEG resources from the second MPEG-2 TS MHP OC (see [pg. 4, ll. 13-15], [pg. 4, ll. 33-35] for the use of lid URLs; see also [pg. 5, ll. 6-10] for combined streams which are received by a set top box at which time a viewer picks out a service for viewing; see also [pg. 5, ll. 20-32] for retrieving address information such as URLs from one of the multiple streams or resources such as HTML pages, news, or a TV program; see also [pg. 2, ll. 41-44] where the steps which proceed retrieving, the reverse operations used to embed the TS prior to receiving, are known to have been conducted in the processes described herein).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art that MPEG-2 and MPEG-4 media streams can be linked through addressing, as taught in Pereira, when receiving data in a type of MHT OC, as taught in Djupsjobacka, because linking multiple data streams in required to synchronize a scene to a media stream.

**Regarding claims 9, 22, 33 and 46:** The combined teachings of Pereira, in view of Djupsjobacka, Stone and Peng, teach wherein retrieving or embedding MPEG-resources from MHP OC, in response to accessing or using an address, includes retrieving or embedding MPEG-4 resources selected from the group including audio, video, and systems data (see Pereira [section 3.3.3], [section 7.4], [section 7.4.3] for being capable of retrieving and embedding audio, video and systems data).

Pereira does not teach where the resources are embedded using an APU.

Djupsjobacka teaches a service name server that functions in accordance with the methods of the disclosed invention (see [pg. 6, ll. 21-24], [pgs. 7-8, ll. 56-3]).

**Regarding claims 10, 23 and 24:** The combined teachings of Pereira, in view of Djupsjobacka, Stone and Peng, teach wherein decoding with a decoder the MPEG-resources includes an action selected from the group including enhancing audio data in the MPEG-2 TS, enhancing video data in the MPEG-2 TS, and using the systems data to establish an interactive audiovisual scene and communication link (see Pereira [section 3.3.2], [3.3.3] for enhancing audio and video by synchronizing events defined in the access units).

**Regarding claims 11 and 35:** The combined teachings of Pereira, in view of Djupsjobacka, Stone and Peng, teach the method comprising: establishing an interactive audiovisual scene and communication link in response

to decoding MPEG-4 systems data (see Pereira [section 7.4.3.1] where timing relations which are maintained for MPEG-4 data streams).

Pereira does not teach where said method is enabled by a system using a transmitter having a transmit interface and receiver to do so.

Djupsjobacka teaches using a transmitter with an interface which communicates with a receiver to enable said communication link (see [abstract], [fig. 2a], [fig. 7], [pg. 2, ll. 1-6], [pg. 4, ll. 11-20]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to design a transmitter with an interface, as taught in Djupsjobacka, to implement the methods of establishing an interactive scene as taught in Pereira, because it is necessary to have a physical device capable communicating to create a communication link.

**Regarding claims 13, 24, 37 and 47:** The combined teachings of Pereira, in view of Djupsjobacka, Stone and Peng, teach wherein accessing an address in response to the URI includes additionally accessing an address selected from the group including a local cache address and a Web protocol identifier; and, the method further comprising: retrieving MPEG-4 resources, in response to accessing the address, from a source selected from the group including a local cache and a website (see Pereira [section 3.3.1] for playback of received content such as a presentation from a local file or in a unicast streaming; see also [section 3.1.6] for real time streaming protocol used in internet streaming applications).

Pereira does not teach generating addresses using an APU.

Djupsjobacka teaches creating addresses using a service name server which is a part of the data transmission network system (see [pg. 4, ll. 11-15], [pg. 4, ll. 31-35], [pg. 7, ll. 8-20]; see also [pgs. 7-8, ll. 56-3]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to design a device capable of generating addresses, as taught in Pereira, as taught in Djupsjobacka, to be used for embedding in to the MPEG-2 transport stream, as taught in Pereira, because a physical device is necessary to implement the creation of the content filled transport stream.

3. Claims 12 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pereira, in view of Djupsjobacka, Stone, Peng and Carsten Herpel ("Elementary Stream Management in MPEG-4" published in IEEE, March 1999).

**Regarding claims 12 and 36:** Pereira does not teach method or system comprising: caching the retrieved MPEG-4 resources.

Herpel however teaches caching MPEG-4 resources (see [pg. 1, Introduction, section 1], [fig. 6], [pg. 6 section A] for storing access units in a storage buffer of stream data until a later time; see also [pg. 8, section D] for storing received data in a separate file).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to store resources, as taught in Herpel, when receiving said data, as taught in Pereira, because it would be advantageous to be capable of accessing resources received by a data stream at a later time.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Thomas whose telephone number is (571) 270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. Thomas

/Andrew Y Koenig/
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